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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/220,724	12/24/1998	AARON ABBOTT	P-5351	3040

24510 7590 05/29/2003

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EXAMINER

PRIETO, BEATRIZ

ART UNIT	PAPER NUMBER
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2142

DATE MAILED: 05/29/2003

25

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

09/220,724

Applicant(s)

ABBOTT ET AL.

P724

Examiner

B. Prieto

Art Unit

2142

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 12 May 2003.
- 2a) ☐ This action is FINAL. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-9 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-19 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- 11) ☐ The proposed drawing correction filed on _____ is: a) ☐ approved b) ☐ disapproved by the Examiner.
If approved, corrected drawings are required in reply to this Office action.
- 12) ☐ The oath or declaration is objected to by the Examiner.

Priority under 35 U.S.C. §§ 119 and 120

- 13) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
* See the attached detailed Office action for a list of the certified copies not received.
- 14) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application).
a) ☐ The translation of the foreign language provisional application has been received.
- 15) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.

Attachment(s)

- 1) ☐ Notice of References Cited (PTO-892) 4) ☐ Interview Summary (PTO-413) Paper No(s). _____
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948) 5) ☐ Notice of Informal Patent Application (PTO-152)
- 3) ☐ Information Disclosure Statement(s) (PTO-1449) Paper No(s) _____ 6) ☐ Other:



DETAILED ACTION

1. This communication is in response to Amendment D, filed 05/12/03, claims 1-9 remain pending and are hereby set forth for examination.
2. Quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejection set forth in this Office action may be found in previous office action(s).
3. Claims 1-9 are rejected under 35 U.S.C. 103(a) as being unpatentable over Otto U.S. Patent No. 5,7106,431 in view of Shing et. al. (Shing) U.S. Patent 5,495,610.

Regarding claims 1, 8, and 9, Otto teaches an system/method for hierarchical distribution (col 3/lines 29-49) of software allowing distribution of a software package (col 4/lines 4-14) comprising at least a first and second package to a plurality of target nodes (col 8/lines 59-61), said apparatus comprising:

a distribution (provider/vendor) node for transmitting packages of software (col 2/lines 45-58, col 4/lines 4-14, distributor in communication with branch (110) node, col 11/lines 59-64); therefore distributing a software package to a first and second node received from a branch node with received said package from distribution node over common network link;

wherein the distribution is performed without the plurality of target nodes initiating the distribution (prior art distribution initiated by, col 1/lines 52-62, distribution process col 5/lines 45-52, initiated by, col 8/lines 27-40);

at least one branch (110) node in communication with said distribution node (col 4/lines 6-col 5/line 18) arranged received revision files (col 2/lines 45-58, software package, software files, col 8/lines 59-62) to be stored therewith from any source (col 8/line 22-26); and

first (120a) and second (120b) target nodes, said first target node being in communication with said branch (110) node via a first network link, and said second target node being in communication with said branch node via a second network link (col; 4/lines 61-col 5/line 31, Fig. 1, col 5/lines 31-52); said first package already being present on said second target node, contents of said second package are determined by a distribution server before the contents are distributed thereby distributing in accordance to said packages and packages already present in target node (means for determining packages comprising a software package that are present on said second target node, col 5/lines 45-52, determining files already present, col 8/lines 63-col 9/line 11, node level presence determination means, col 10/lines 22-37,

Art Unit: 2142

therefore thereafter sending only required package software to said (second) target node based on existing software package; and sending only required software package to said first target node; whereby both the first and second packages are distributed to both said first and second target nodes;

each branch (110) node being arranged to receive a software package comprising a plurality of packages (col 8/lines 55-63)) from said distribution node independently (col 8/lines 22-26);

said branch node being arranged to transmit said first package via said first and second network links to said first and second target nodes, and said second package via said second network link to said second target node (col 5/lines 45-52, col 10/lines 44-50); and

said target nodes being arranged to install each package once the package is received (col 9/lines 26-38, 53-58, means for installing received package); however Otto does not explicitly where the software is particularly hierarchical software;

Shing teach a system/method for hierarchical software distribution (software distribution, col 3/lines 50-65, hierarchical software, col 2/lines 24-35), software package comprising at least a first and second package (col 7/lines 3-12), system comprising a distribution (1) node and a branch (2) node (Figs. 1-2) and multiple target (3) nodes, all nodes in communication with one another, teaching means for the branch node to distribute to individual target nodes based on the software instances (i.e. the build release, col 5/lines 66-col 6/line 3) to be distributed.

It would have been obvious to one ordinary skilled the art at the time the invention was made to include means for distributing hierarchical software as taught by Shing, motivation would be to enhance existing system with means to determine all programs and process associated with a hierarchical software application that has been modified and identify corresponding target workstation nodes that require said modified programs and process and distributing accordingly.

Regarding claim 2, the combined teachings as discussed above, teach an apparatus according to Claim 1 wherein said software package is sent as a contiguous package over said first network link (Otto, col 5/lines 7-30).

Regarding claim 3, the combined teachings as discussed above, further teach wherein said first branch node is provided with information regarding which packages should be forwarded to which target nodes (Otto: means for receiving col 8/lines 63-col 9/line 1, col 10/lines 22-37).

Art Unit: 2142

Regarding claim 4, the combined teachings as discussed above, further teach wherein said first branch node is in communication with said first target node via a second branch node, said second branch node being in communication with said first branch node via said first network link, and said second branch node being in communication with said first target node via a third network link; said second branch node being further in communication with a third target node via a fourth network link (Otto; col 7/lines 50-col 8/line 5).

Regarding claim 5, the combined teachings as discussed above, further teach wherein each of said branch nodes is provided with information regarding target nodes to which each branch node is responsible for sending said packages and which of said first and second packages are required by said nodes (col 2/lines 24-44, associated responsibility levels, col 3/line 29-49, col 12/lines 23-52, each node responsible for sending packages required by associated other node(s); and wherein each branch node forwards the information to subsequent nodes along each branch, editing said information for each branch to include only target nodes reached via that branch (Otto: each node configured with communication means including the reception/transmission of signals including address, message or instruction to communicate information to other nodes, col 5/lines 19-31, means for forwarding to subsequent level node information, in response to information regarding target nodes which the acting branch node is responsible, col 5/lines 32-65, means for creating a revision (programs, subroutines, procedures, etc.) file for transmission, col 9/lines 19-26).

Regarding claim 6, the combined teachings as discussed above, further teach wherein each of said branch nodes is provided with information regarding the target nodes which require each of said first and second packages, and is further provided with information regarding which of said target nodes said branch node is responsible for forwarding information from said distribution node (Otto: col 8/line 22-43) and which immediate branches (links, paths or addresses) the branch node uses to reach each of said target nodes for which it is responsible (Otto: col 5/lines 22-31); whereby each branch node can ascertain which packages should be forwarded along each immediate branch (Otto: col 9/lines 31-62).

Regarding claim 7, the combined teachings as discussed above, further teach wherein said software package comprising plurality of files (Otto, i.e. two or more packages, col 8/lines 59-61), wherein first package comprises at least two sub packages (Otto, col 9/lines 19-26, file comprising a plurality of files, files comprising a plurality of sub files, col 10/lines 51-59) and wherein installation of said two sub

Art Unit: 2142

packages on each of said target nodes must be performed in a specified order (col 10/line 51-59); wherein installation of one of said sub-packages has already occurred on said first target node (Otto: mean for identifying information already installed on said target node, col 8/lines 63-col 9/line 11, determining existing information on target node, information comprising, col 2/lines 50-53, revision comprising, col 5/lines 37-45); and wherein both of said sub packages are distributed to said first and second target node based on the determination of existence or lack of said sub-packages (Otto: col 8/lines 63-col 9/line 11).

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Prieto, B. whose telephone number is (703) 305-0750. The Examiner can normally be reached on Monday-Friday from 6:00 to 3:30 p.m. If attempts to reach the examiner by telephone are unsuccessful, the Examiner's Supervisor, Mark R. Powell can be reached on (703) 305-9703. The fax phone number for the organization where this application or proceeding is assigned is (703) 308-6606. Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is (703) 305-3800/4700.

Any response to this action should be mailed to:

Commissioner of Patents and Trademarks
Washington, D.C. 20231

or Faxed to:

(703) 746-7239, for Official communications and entry

Or:


(703) 746-7240, for Non-Official or draft communications, please label
"PROPOSED" or "DRAFT".

Or Telephone:

(703) 306-5631 for TC 2100 Customer Service Office.

Hand-delivered responses should be brought to Crystal Park II, 2121 Crystal Drive, Arlington, VA, Fourth Floor (Receptionist), further ensuring that a receipt is provided stamped "TC 2100".

B. Prieto
TC 2100
Patent Examiner


MARK POWELL
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